Communications of the Association for Information Systems

Volume 38 Article 33

5-2016

The Role of the Doctoral Consortium: An Information Systems Signature Pedagogy?

Guy G. Gable
Queensland University of Technology, g.gable@qut.edu.au

Robert Smyth
Queensland University of Technology

Alison Gable
University of Queensland

Recommended Citation
Gable, Guy G.; Smyth, Robert; and Gable, Alison (2016) "The Role of the Doctoral Consortium: An Information Systems Signature Pedagogy?," *Communications of the Association for Information Systems*: Vol. 38 , Article 33.
DOI: 10.17705/1CAIS.03833
Available at: http://aisel.aisnet.org/cais/vol38/iss1/33

Communications of the Association for Information Systems

Research Paper ISSN: 1529-3181

The Role of the Doctoral Consortium: An Information Systems Signature Pedagogy?

Guy G. Gable
Information Systems School,
Queensland University of Technology
Brisbane, Australia
g.gable@qut.edu.au

Robert Smyth
Information Systems School
Queensland University of Technology
Brisbane, Australia

Alison Gable
School of Social Science
University of Queensland
Brisbane, Australia

Abstract:

The doctoral consortium is a well-established, widely endorsed event in the information systems (IS) discipline that occurs adjunct to mainstream IS conferences (e.g., ICIS, ECIS, PACIS, AMCIS). Anecdotal evidence suggests that PhD students' experience of these events is almost universally positive; some have referred to the events as "life changing" or "magical". Further, both participating students and scholars strongly perceive the events' value. To extend the experience to more PhD students, doctoral consortia are more recently being run locally and unaffiliated with any conference. By reviewing the literature and historical documents and conducting a series of interviews and email exchanges with past conference co-chairs, we explore the merits of IS doctoral consortia (consortia). We position the IS doctoral consortium as distinct from forms of doctoral student development in other disciplines, a veritable "signature pedagogy" for IS. In examining the practices and motivations underlying doctoral consortia, we explain related phenomena to improving future consortia. In addition, by appending much historical detail, we add to the IS discipline's organizational memory.

Keywords: Doctoral Consortium, Information Systems Discipline, Conferences in Information Systems, Doctoral Studies, Signature Pedagogy, Expert Panel, Professional Project.

This manuscript underwent editorial review. It was received 10/09/2015 and was with the authors for 1 month for 1 revision. Ping Zhang served as Associate Editor.

1 Introduction

The doctoral consortium is a well-established and widely endorsed event in the information systems (IS) academic discipline (Avison, Kautz, Sigala, Whitley, & Winter, 2005). Adjunct to mainstream IS conferences (e.g., ICIS, ECIS, PACIS, AMCIS, and ACIS), in essence, a doctoral consortium involves senior scholars' advising selected doctoral students. Anecdotal evidence suggests that students, scholars, and PhD student supervisors all strongly value the events. PhD students' experience of these events is almost universally positive; some have referred to the events as "life changing" or "magical". In recent years, organizers have increasingly run doctoral consortia locally and unaffiliated with any conference to extend the doctoral consortium experience to more PhD students. As such, we look back at the history of doctoral consortia in information systems and examine the precepts underlying the design, how they are run, what constitutes their success, and their potential to continue to operate effectively into the future.

More generally, a "consortium" is some sort of cooperative arrangement among groups or institutions. The term "doctoral consortium" refers more specifically to such a cooperative arrangement to develop doctoral students and their research. This broad definition excludes such collaborations as that reported by Long (2007, p. 262): "the development and implementation of a five-school consortium for delivery of an established PhD in Nursing", which emphasizes administrative collaboration in offering doctoral programs. For this paper, we define the doctoral consortium as a formal, scheduled event at which doctoral students, whose work has advanced beyond detailed design, present their research for feedback from external scholars and peers who have reviewed advance reports on the work presented. Though we discuss how the doctoral consortium is much more than this definition entails, it is, we believe, this emphasis on individual students and their research design through direct interaction with scholars that defines IS doctoral consortia. One could regard this doctoral consortium style as a signature pedagogy (Golde, 2007) of IS (and neighboring disciplines such as computing and information disciplines). More broadly, we have come to understand the doctoral consortium as a significant pedagogical tool and mechanism of disciplinary socialization. In this paper, we examines the varied roles the doctoral consortium can play in advancing the interests of doctoral students and the wider IS community.

In this paper, we capture the doctoral consortium's evolution in the IS discipline, identify its core components, apply theoretical insights to better understand its significance, and consider future possibilities. This paper may interest leaders in the IS discipline with an interest in the IS discipline's health and longevity, educationalists in IS and other disciplines with an interest in the developmental value of both conference-aligned and local doctoral consortia, and theorists interested in the link between the practice of the doctoral consortium and the pedagogical, professional, and disciplinary dynamics underlying it. More pragmatically, this paper—particularly the appendices—may interest students considering seeking nomination to a doctoral consortium, supervisors considering nominating their students, doctoral consortium co-chairs responsible for organizing and running doctoral consortia, and conference and program chairs required to coordinate with doctoral consortium chairs.

This paper proceeds as follows. In Section 2, we describe our research approach. In Section 3, we describe the history of IS doctoral consortia and their structure. In Section 4, we analyze the literature to theoretically explain consortia's aims. In Section 5, we return to the core activity of student-scholar interaction, which is distinctive of IS doctoral consortia as a signature pedagogy, and advocate formal recognition of this activity as an "expert panel review". Finally, in Section 6, we conclude the paper by discussing our main findings, the study's limitations, and future research directions.

2 Research Approach

Contemporary knowledge management emphasizes the importance of harnessing the often tacit knowledge of experienced operatives. Yet, IS academics, major proponents of knowledge management, have not always been vigilant in applying this principle to their own discipline. In the first instance, we wrote this paper due to the first author's commitment at the Pacific Asia Conference on Information Systems Executive to contribute to PACIS organizational memory.

The first author has been actively involved in the organizing and running of some 20 conference-aligned doctoral consortia over more than twenty years (seven as co-chair and 14 as scholar; see Appendix A). Thus, primary study evidence derives substantially from the participant experience-base of the first author as the primary key informant. Additionally, and to fill gaps, we obtained factual details from consortium participants (students, scholars, and consortium chairs) across the four levels of consortia we identified

(i.e., international, regional, national, and local). We reviewed past consortia documents to triangulate data gathered from key informants. This methodology helps to overcome the lack of formal organizational history on IS doctoral consortia. Through their roles in their communities, in this case the IS discipline, strategic key informants have immediate and ongoing access to core information, develop meaningful knowledge of this information, and are able to communicate the historical, social, and cultural patterns of their group (Tremblay, 1957). Importantly, feedback from key informants served as a type of progressive learning (Tremblay, 1957) about IS consortia.

We began this study to document the history of IS consortia and, thereby, distil common best practices to help others to effectively organize and run future consortia. By reflecting on the range of consortia with which the key informant has experience, we sought in the first instance to capture the commonality across consortia to develop a harmonized set of best-practice prescriptions. While the commonality observed was substantial, which we report throughout the paper and in the appendices, we also found differences that suggest there is value in conceiving the four study sample consortiums as representative of four "levels" of Consortia: 1) international (e.g., ICIS), 2) regional (e.g., PACIS), 3) national (e.g., ACIS), and 4) local (e.g., ISS).

As our first overture to the broader community, we emailed all past co-chairs of ICIS and ACIS to seek confirmation of existing or missing data on these consortia (we had full details for PACIS and ISS) (see Appendices C to F). Later, we sent a draft of the paper to 21 selected past, current, and pending co-chairs of ICIS (10), PACIS (4), ECIS (2), AMCIS (2) and ACIS (3) (several were involved in a consortium at more than one of these conferences). Thus, though study consortia included only the four with which the key informant had experience (ICIS, PACIS, ACIS, ISS), we sought feedback from representatives of ECIS and AMCIS as well. Most of these individuals will have also served as scholars across these events. Further, three were elected AIS presidents. Though our selection of contacts was admittedly somewhat opportunistic, based on personal contacts and the response to our earlier email, we sought coverage of all study case consortia plus AMCIS and ECIS. In particular, we sought response from "key informants" with a more current experience of these events because they would better recall the events' details. We sent a final summary of all changes to the paper based on key informant feedback to all key informants.

3 History of Information Systems Doctoral Consortia

From the earliest instances of national and international IS conferences, scholars have recognized the importance of holding a doctoral consortium in conjunction with the conference. The discipline's most prestigious conference, the International Conference on Information Systems (ICIS), illustrates this long association well:

> *In December 1980, the first International Conference on Information Systems (ICIS) was held. The major objective of ICIS's founders was to establish a forum for showcasing and disseminating exemplars of good IS research. They perceived this objective would be accomplished in two ways: first through focusing on and celebrating high quality IS research; and second, through establishing a doctoral consortium designed to influence the training of future IS researchers and ultimately the quality of IS research*. (Benbasat & Weber, 1996, p. 390)

Since 1980, conducting a doctoral consortium with each mainstream IS conference has generally been the practice, albeit with somewhat broader objectives than those that Benbasat and Weber (1996) enunciate.

ICIS runs under the aegis of the Association for Information Systems (AIS), itself the premier professional organization for IS researchers, teachers, and practitioners worldwide. Founded in 1994, AIS divides the world into three regions: 1) the Americas, 2) Europe, the Middle East, and Africa, and 3) Pacific Asia. Each region has a main AIS-endorsed conference: The Americas Conference on IS (AMCIS), The European Conference on IS (ECIS) and The Pacific Asia Conference on IS (PACIS), respectively. The closeness of these events to AIS varies: AIS "owns" and runs AMCIS, while ECIS runs largely independently. In 2014, PACIS signed a formal agreement with AIS specifying respective rights and responsibilities, which will likely result in closer involvement with AIS and increased emphasis in the PACIS consortium on socialization in AIS. All three events now require that delegates be AIS members (non-members pay an additional fee to attend and, in doing so, become members).

One should see the ICIS doctoral consortium's establishment in 1980 against a background at the time of questioning of the IS discipline's status as a legitimate academic discipline. During the 1970s, when, in spite of strong student demand for IS courses, IS struggled to gain a foothold in universities, it came under criticism from the established disciplines for perceived weaknesses in its research culture (e.g., Dearden, 1972). The situation was analogous to that experienced at earlier times by other newly emerging discipline areas, and one can see the IS community's reaction to mirror those of their forerunners in evolving disciplines. Specifically, IS in the 1970s confronted challenges to its legitimacy similar to those that marketing faced in the 1960s. The record shows (Lazer & Bennett, 2011) that marketing academics responded to the criticisms of inadequate research output by turning to the research methods of allied disciplines and by establishing, in 1966, a doctoral consortium linked to their annual academic conference. Similarly, when we observe the role of doctoral consortia in building accounting's research profile (Fogarty & Jonas, 2010), we perceive the doctoral consortium as an important contributor to establishing the legitimacy and academic status of that emerging discipline.

Based on the ICIS doctoral consortium's success, the IS community has progressively extended the practice. Each of the major regional IS conferences (AMCIS, ECIS, and PACIS) has incorporated a doctoral consortium in conjunction with the conference. National conferences such as Australasian Conference on Information Systems (ACIS) have gone down a similar path. And, primarily to extend the doctoral consortium experience to more local PhD students, single IS scholars, faculties, or even groups of schools across multiple faculties and universities have more recently increasingly begun to run IS doctoral consortia unaffiliated with any conference. An example of such a local event is the Information Systems School Doctoral Consortium (ISS) run annually at Queensland University of Technology (QUT) in Brisbane, Australia, since 2008.

3.1 The Structure of Consortia

Based on the first author's (key informant) experience, we discuss ICIS, PACIS, ACIS, and ISS, all of which have a similar structure. While we consider PACIS to represent the Pacific Asia region's consortia, we do in part acknowledge its differences from ECIS and AMCIS. Also, for completeness in relation to these three AIS regional events, we encourage the community to update these conferences' Wikipedia entries with similar detail (and more) to that provided here for PACIS (e.g. Appendix D).

Typically, each consortium starts and ends with a plenary session and a social event; throughout the consortium, other plenary sessions and/or social events will also often occur. The main and most distinctive activity in the consortium involves sessions in which students and scholars are organized into parallel streams. In these sessions, each student presents their research (summary reports of which are circulated in advance) for discussion (40-60 minutes for presentation and discussion). We chose the term "scholar" in this context after much deliberation. We were torn between scholars, mentors, faculty, advisors, and reviewers. We believe advisors is used widely in North America with reference to the students' supervisory panel (supervisor is the term used in Australia). We were concerned that mentor implies a long-term and ongoing relationship, which future target staff to be involved in consortia (particularly at the local level) might perceive as daunting. Faculty is, perhaps, the term most immediate for North Americans but less so in Pacific Asia, and reviewer is too one-sided.

To establish trust between the institution, student, and consortium, students considered for participation must be nominated by their home institution (cannot self-nominate), which ensures supervisor awareness and endorsement. Normally, a student's research must have progressed beyond local defense of the research design. One possible measure of a doctoral consortium's quality is a relatively low percentage of nominated doctoral students accepted for attendance and participation, but several factors may make this guide a poor one. In particular, some consortia are highly inclusive and will aim to accommodate all but clearly unprepared candidates. Other consortia (e.g., ICIS) are more selective. Criteria for selection may include students' stage of progression (some consortia prefer students whose work is relatively more advanced), regional preference (contentious), balanced representation across the region or internationally, and/or perceived research quality. More inclusive consortia are likely to host students whose stage of progression varies from the design stage through to the write-up stage (e.g., 6 months from completion and focused on packaging results). In these circumstances, all involved (peers, scholars, organizers) need to have a clear sense of what stage each student is at and how long they have been enrolled. For a British-style three-year (or more) thesis (minimal coursework), supervisors often expect a detailed design by the end of the first year. A four- or five-year North American PhD student might not achieve such a design until end of second or third year (one to two years coursework on the front end).

Regardless, consortia, as a rule, require that a student's work, at a minimum, has advanced beyond local defense of the research design.

We can categorize activities that occur during the consortia into four main kinds: 1) formalities, 2) informalities, 3) generalized guidance, and 4) personalized guidance. The formalities include opening and closing plenary sessions and the presentation of awards or certificates. Informalities may involve group meals and social evenings, icebreaking sessions, skits, and team-building sessions. Generalized guidance occurs via panel sessions and keynote and invited addresses, while personalized guidance occurs in the parallel student-presentation sessions and via one-to-one interaction throughout.

Five to eight student presentations per stream appears to be the practical maximum mental load for all involved; thus, a larger overall number of students tends to entail more parallel streams (rather than a longer overall event). Table F3 (Appendix F) shows a sample schedule of a streamlined one-day local event consistent with the above principles (also note it involves no more than two contiguous student presentations). Longer conference-aligned consortia (e.g., PACIS and ACIS (1.5 days) and ICIS (2.5 days)) generally offer more plenary events (e.g., panels, keynote/invited presentations, awards/certificates).

Of course, most of the activity associated with a consortium precedes the actual event. Key direct players in relation to consortia are: 1) the students, 2) the scholars, 3) the co-chairs, and 4) the local arrangements chair (logistics). Indirect players include nominating authorities, nominating supervisors, the conference co-chairs, and, possibly, the conference program co-chairs (see Appendix B for a discussion on student submissions as research-in-progress papers).

The main designers and drivers of a consortium are its co-chairs, whose key priorities include 1) a strong panel of scholars (to attract nominations and to review and give quality feedback on student work), 2) adequate nominations that are sufficiently advanced and of appropriate quality, 3) a well-organized, executed, and enjoyable event, 4) appropriate confidentiality, and 5) maximum value for all involved. Appendix B includes a Gantt chart depicting the approximate timing of representative key activities and milestones in the 24 months of preparation preceding a scheduled doctoral consortium. Below the chart in Appendix B, we discuss each of the main activities/milestones. Though the timeline in Appendix B ends with running the consortium and though we constrain discussion herein to activities at the consortium, given the prominence of social media, we feel compelled to briefly acknowledge possible activity beyond the consortium. One can exploit the ubiquitous presence of software that promotes social interaction, to strengthen the role of the doctoral consortium as a mechanism for academic and social networking (Gillet, Helou, Joubert, & Sutherland, 2009) beyond the event. The idea of maintaining an extended support network and building on personal links established at a doctoral consortium through readily accessible social networking software may appeal to students as both a source for strengthening their research and for maintaining the positive motivation emanating from attending the consortium. Regardless, the consortium experience will, for most students, have ongoing positive effects by both improving their research and helping them to socialize with other academics in their communities of practice and the IS discipline.

3.2 International Conference on Information Systems' (ICIS) Doctoral Consortium

The International Conference on Information Systems (ICIS) has run annually since its first offering in 1980 (see Appendix C). ICIS is the largest and most prestigious mainstream IS event and attracts strong submissions (its paper-acceptance rate typically falls below 20 percent). ICIS is the main annual meeting place for many, including the most senior and most notable, IS researchers. ICIS's size stabilized over a decade ago at around 1000+ delegates that hail from most developed and many developing countries in the world.

The ICIS executive committee[1] has overall responsibility for running ICIS and must ensure it is consistent with the overall objectives of the conference and subject to the articles and by-laws of the Association for

[1] *The membership positions on the ICIS Executive Committee shall be: 1) Conference Chairs of the Conferences in the current year, immediate past year, and the following year; 3) Program Chairs of the Conferences in the current year, immediate past year, and the following year; 3) Doctoral Consortium Chairs of the Conferences in the current year, immediate past year, and the following year; 4) Budget Officer of the Conferences in the current year, immediate past year, and the following year; 5 immediate past chair of the ICIS executive committee (non-voting); 6) VP-meetings and conferences of AIS council; 7) ICIS executive committee secretary; 8) AIS Treasurer; and 9) executive director of AIS (non-voting).* (AIS, n.d.)

Information Systems. The ICIS executive committee is accountable to the council of the Association for Information Systems (AIS). The chair of the ICIS executive committee is a member of the AIS council as the ICIS representative (AIS, n.d.).

ICIS has offered a consortium since the conference's inception in 1980 (2015 heralded its 36th offering). Consistent with its high status, the conference's accompanying doctoral consortium also sets a high standard. The consortium duration has varied from a high of four days to the more recent two-and-a-half days. Selection for acceptance is competitive because each university can nominate only one individual and ICIS selects only about 40 students (up from 20 before 1990) from typically well over 100 nominations.

3.3 Pacific Asia Conference on Information Systems' (PACIS) Doctoral Consortium

PACIS, first ran in 1993 in Taipei, Taiwan, as the Pan Pacific Conference on Information Systems. It occurred again 1995 in Singapore and became the Pacific Asia Conference on Information Systems in 1997 in Brisbane, Australia. It occurred again in 2000 in Hong Kong and annually since ("Pacific Asia", n.d.). PACIS continues to move around the Pacific Asia region and has, as of 2015, occurred 18 times in 12 countries (also including Korea, Japan, China, Thailand, Malaysia, New Zealand, India, and Vietnam). Its size stabilized for several years prior to 2013 at around 300 paper submissions, a 40 percent acceptance rate, and 250 delegates but more than doubled in size in 2013 (583 delegates). It increased again in 2014 (648 delegates). For additional detail on PACIS, see Gable (2007). PACIS is governed by its executive committee[2]. The executive committee is responsible for ensuring that the conference is run in a professional way and is consistent with the conference's overall objective.

PACIS has offered a doctoral consortium since it introduced it in 1997(see Appendix D). It is with this regional consortium that the first author has been most closely associated and for which greatest detail is readily available. The consortium was a one-day event prior to 2009; since 2009, it has varied between one-and-a-half and two days. Student numbers have ranged from 13 to 29 (19 on average), with these students typically organized into three to five parallel streams with two external scholars per stream.

3.4 Australasian Conference on Information Systems' (ACIS) Doctoral Consortium

The Australasian Conference on Information Systems (ACIS) first occurred in 1990 and was technically only a "national" event in its first four years. It expanded to include New Zealand in 1994 and changed its name from the "Australian" to the "Australasian" Conference on Information Systems in that year. Nonetheless, it does, we believe, represent other similar national events and is quite distinct from the main regional event PACIS. ACIS has had a similar growth trajectory to PACIS and stabilized at a similar size through 2012 (300 submissions, 40% acceptance, 250 delegates); however, it has not doubled in size since like PACIS has. For additional detail on ACIS, see Gable (2008).

The ACIS executive committee comprises the president of the Australasian Association for Information Systems (AAIS) (AIS's Australasian chapter, which incorporates the information systems community in Australia, New Zealand, and the South Pacific), the president of Australian Council of Professors and Heads of Information Systems (ACPHIS) (the peak body established to represent Australian information systems academics), the president of New Zealand Professors and Heads of Information Systems (NZPHIS) (the peak body established to represent New Zealand information systems academics), a representative from the IS Technical Council of the Australian Computer Society (ACS) (a peak body in the Australian Computer Society that draws on senior ACS members and representatives of senior IS bodies to advocate on behalf of the IS discipline), and the organizing chairs, the program chairs, and the doctoral consortium chairs of the immediate past ACIS, the current ACIS, and the next ACIS. The AAIS secretary is the secretary of the ACIS executive committee (ACPHIS, 2012).

ACIS first introduced a consortium in 1993, the fourth running of that conference, and has offered one annually since (see Appendix E). The first ACIS conference was held at Monash University in 1990 with the name First Annual Conference on Information Systems. In 1991, it was called the Second Annual Conference on Information Systems and Database Special Interest Group. In 1992, it became the

[2] The PACIS executive committee comprises: 1) conference chairs of the conferences in the current year, immediate past year, and the following year; 2) program chairs of the conference in the current year, immediate past year, and the following year; 3) doctoral consortium chairs of the conference in the current year, immediate past year, and the following year; 4) treasurer of the conference in the current year, immediate past year, and the following year; and 5) regional representatives of the AIS.

Australian Conference on Information Systems, and, in 1994, in recognition of New Zealand's substantial involvement, the name changed to the Australasian Conference on Information Systems. Until the advent of the Pacific Asia Conference on Information Systems (PACIS) in 1993, ACIS was the only substantial IS conference in the region. Since 1993, ACIS and PACIS have coexisted amicably and attract a large overlap in delegates (Gable, 2008, p. 2). The ACIS consortium's duration has varied between one and two-and-a-half days, with one-and-a-half days most common. Based on known numbers as of this writing, student numbers peaked at 32 (2001), dropped to 18 (2006), rose to around 23, and, more recently, stabilized at around 20.

3.5 Information Systems School's (ISS) Doctoral Consortium

As example of a consortium at the local level, the first author has chaired the Information Systems School's annual doctoral consortium at Queensland University of Technology, Brisbane, Australia, since 2008 (see Appendix F). We acknowledge that the IS school at QUT, with approximately 30 academic and 80 higher-degree research students, does not represent most IS groups worldwide. In the USA, the country having the largest number of IS academics, IS tends to be a major in a business school with two to four IS staff. Nonetheless, a local event with as few as two or three student presentations and one or two external scholars is viable.

As with conference-linked doctoral consortia, selected PhD students at an appropriate stage of progression prepare a brief overview of their research, which external volunteer scholars with relevant expertise review in advance. At the consortium, the students present their work in parallel streams for their peers and attending experts to critique. Unlike conference-linked consortia, local-level consortia expect supervisors to attend their student's session (they are barred from most conference-linked consortia with attendance in the streams typically restricted to those students presenting, the stream scholars, and the consortium co-chairs) and the presentations are open to all interested parties (e.g., academics, other research students, industry partners). This arrangement aims to maximize exposure and feedback and better cross-fertilize ideas. Given that all students in a stream are "local", this arrangement, too, minimizes potential undermining of the student-supervisor relationship; issues and concerns raised are public with the supervisor present, and, though not encouraged, supervisors can interject where appropriate. Local-level consortia can assign local stream facilitators to ensure a positive student experience (particularly given the close comradery among local students).

4 Pedagogical, Discipline, and Professional Underpinnings of the Doctoral Consortium

The first ICIS doctoral consortium in 1980 sought to address perceived weakness in IS research at the time—that is, to strengthen the research skills of future IS researchers to improve the broader IS research culture. When we observe subsequent IS doctoral consortia, we can infer a more nuanced range of aims that suggest a continuing effort to maintain and enhance the professional and disciplinary standing of IS and its members. Reflecting on these often implicit aims provides a basis for understanding and evaluating the pedagogical principles that underpin the consortia.

We can loosely categorize consortia's aims as 1) student focused, 2) disciplinary, and 3) professional. These aims are not mutually exclusive (e.g., strong research contributes to student career/professional development; strong research and strong students contribute to discipline development). In this context, we are reminded that pedagogical principles have the capacity to impact not just the student but also, through the student, the wider discipline and other aspects of society. However, whether conscious intended or not, consortia can have differing emphasis across this range of aims with concomitant variability in the pedagogy applied.

As we note above, the doctoral consortium fundamentally promotes the progress of doctoral students by enhancing their knowledge of the research process, particularly in relation to their own doctoral research (Ridley, 1996). However, as the range of consortia aims that we suggest above reflect, we can look to theory to inform not only the consortium's impact on the individual student but also its promotion of professional values and its enhancement of the discipline.

4.1 Learning in the IS Research Community: The Consortium as a Signature Pedagogy?

As the first author has observed, an important outcome of IS doctoral consortia at all levels, has been a very high level of satisfaction and increased motivation reported at the end of the consortia by the participating doctoral students. Although the reasons for that response are, no doubt, manifold, participants frequently comment on their peers' and scholars' affirming their work. The sense that respected others, beyond themselves and their supervisors, have reviewed their efforts to that point and provided reassurance that they have the necessary sense of direction to take them to a satisfactory conclusion seems to have great psychological impact.

Since the consortium is based on interaction between doctoral students, their peers, and senior IS academics, one can view it as consistent with theories of learning that view contextual community as vital to an individual's effective learning. Leaders in developing theory related to the role of context and community on the effectiveness of individual learning include Dewey (1938), Piaget (1977), Vygotsky (1978), and Bruner (1996). The authentic and active nature (Dewey, 1938; Piaget, 1997) of the student's role in the consortium occurs via a process of exploring an expert knowledge environment.

Of particular relevance in the context of doctoral consortia is a spectrum of education theory concerned with the student's socially situated learning (e.g., Lave, 1991; Wenger. 1998; Vygotsky, 1978; Seashore Louis, 1995). At the L. S. Vygotsky end of the spectrum is the concept of community as an essential component of individual learning. Further along this continuum is the idea that K. Seashore Louis supports that the group constituting a community of practice collaborate and cooperate as a means of promoting learning for the members of that community of practice. Three factors characterize each community of practice (Wenger, 1999): 1) a shared domain of interest (here IS research), 2) a community in which the members interact and learn from each other, and 3) the practice itself (here comprising the skills, techniques, and resources applied in IS research).

In this regard, the doctoral consortium, with its opportunities for dialogue and participation, serves as a significant pedagogical vehicle for increasing students' social and academic engagement. By virtue of this distinctive characteristic, we propose the IS doctoral consortium as a "signature pedagogy" (Shulman, 2005). Although typically associated with the unique training of practitioners, we believe the concept has relevance here to the preparation of highly qualified IS researchers. The consortium provides the pedagogical space through which students are exposed to the "habits of the mind (content), habits of the heart (values), and habits of the hand (skills)" (Shulman, 2005 p. 59) fostered by the IS research community. A signature pedagogy involves three dimensions (Shulman, 2005, p. 55): 1) the surface structures of concrete teaching and learning (e.g., presentations, questioning, and answering); 2) a deep structure concerned with a set of assumptions about how to impart a body of knowledge and know-how (e.g., critical review and discussion); and 3) an implicit structure in which professional values, attitudes, and dispositions are imparted (e.g., valuing learners, modeling, listening).

While one could regard supervising a PhD thesis as a signature pedagogy (Slater, Brown-Welty, Cohn, & Rodriguez, 2009), the consortium entails a public student performance. Much depends on the students' contributions' creating some degree of uncertainty as to where discussion may lead.

> *Indeed, in these signature pedagogies, students are not only active but interactive. Students are accountable not only to teachers, but also to peers in their responses, arguments, commentaries, and presentations of new data. …Signature pedagogies are pedagogies of uncertainty. They render classroom settings unpredictable and surprising, raising the stakes for both students and instructors …Uncertainty produces both excitement and anxiety. These pedagogies create atmospheres of risk taking and foreboding, as well as occasions for exhilaration and excitement.* (Shulman, 2005, p. 570)

Thus, the uncertainty of the pedagogical space provided by the consortia generates the "magic" that our students and scholars have described. The scholars' facilitation of the students' presentation and discussion at the consortium serves to communicate the value placed on the students' knowledge and their contribution to the discipline. This dynamic, between scholar and student, distinctively characterizes the IS doctoral consortium and transforms it from solely an individual learning opportunity into a collective

development of professional values and identities[3]. All consortia feature this dynamic, but local consortia focus on it specifically.

4.2 Developing the Discipline and Its Reputation

Whitley (2007) provides an important perspective on the doctoral consortium's role in contributing to reinforcing IS's legitimacy. Whitley suggests that three conditions need to exist to establish distinct scientific disciplines. We consider these conditions to be the deep structures of the signature pedagogy and significant for their contribution towards establishing reputational control over the performance of research practices. These conditions include the need for:

1. Scientific reputations to become socially prestigious and to "control critical rewards"
2. Establishing standards of research competence and skills, and
3. A unique symbol system to allow exclusion of outsiders and unambiguous communication between initiates in the discipline.

Since one develops scientific reputations and obtains critical rewards through publishing papers and attracting research funding (Mingers & Stowell, 1997), we can see the IS doctoral consortia as significant contributors to the discipline's prestige via its promoting good research, with correspondent increases in the quality of research output. While this quest for enhanced professional reputation lies at the heart of why IS scholars established IS doctoral consortia, we surmise that IS scholars probably now see an enhanced professional reputation as a by-product of conducting doctoral consortia, rather than a major motivator. Nevertheless, research track records measured by publications in highly regarded journals increasingly define individuals' academic identities and futures (Musselin, 2007). One can examine the consortium's role as a contributor to the IS discipline's prestige in terms of the sociological concept of the "professional project" (Larson, 1977; Macdonald, 1999). Such a perspective helps explain how professional associations, through their collective mobility, reinforce and develop disciplines of practice and set the standards and norms of membership to establish and safeguard reputational standing. From this viewpoint, the concept of a professional project (i.e., a project to achieve market power, social standing, and professional status) captures the motivations and processes of professionalization (Larson, 1977). Unlike an applied project with a beginning and an end, the more abstract notion of a professional project acknowledges ongoing efforts to secure a discipline's future (Macdonald, 1999). One can see the doctoral consortium as a useful contributor to such a project in the IS discipline.

Evidence (see Whitley, 2007) suggests that larger institutional pressures to advocate the necessity of continuing IS's professional project have overtaken this initial disciplinary need for prestige. Now more than ever, we need to recognize the embeddedness of the IS discipline in the organizational context of universities and institutional structures of higher education policy. Increasingly, these organizational and institutional demands are encroaching on the research discipline's space, which the quantity and quality of research output now needed to establish reputational capital for both the discipline and its institutional home base in research-evaluation exercises exemplify. As with other disciplines, IS scholars need to establish clearly defined areas of theoretically based expertise to compete in the knowledge markets of higher education.

One can also see Whitley's (2007) criteria (i.e., "establishing standards of research competence and skills") as central to the contemporary IS doctoral consortium: the consortium emphasizes the promotion of discipline-wide research excellence through the mechanism of engendering high levels of research competence in the doctoral students attending the consortia. This step is significant in any attempt to define for its members the normative practices on which the discipline bases its reputational status (Macdonald, 1999). As we discuss below, promoting research excellence benefits from evaluating student progress through expert review, a characteristic of the doctoral consortium.

At this stage of its development, IS research continues to rely heavily on reference disciplines, a trend working against the development, through doctoral consortia or otherwise, of what Whitley (2007) calls "a unique symbol system". Some thought leaders in IS have urged scholars to develop unique IS approaches to research; Benbasat and Weber (1996, p. 398), for instance, talk of a "fundamental responsibility to build our own theories to account for those phenomena that differentiate our discipline

[3] Although beyond our scope here, we acknowledge the critical nature of the student-scholar relationship in shaping and controlling the nature of "valued" disciplinary knowledge and, indeed, learning identities through the consortium vehicle. We view this element of the consortium as worthy of further theoretical interrogation.

from others". Such a unique approach is not yet manifest in IS research but seems certain to be reflected in the conduct of IS doctoral consortia if we attain a distinct IS theory base. Regardless, the consortium serves as a type of formal communication of standardized research procedures, IS boundary identification, and orientation to "theoretical and analytical goals" (Whitley, 2007, p. 184). As many consider establishing a coherent, non-esoteric, expert knowledge base as foundational to a professional project, the consortium is well positioned to sustain the evolution of IS expertise.

While discipline development occurs through steady and wider community efforts, we position the consortium as an important contributor to these efforts through its focus on research quality, students' competency, and capacity building. Furthermore, the consortium serves to communicate to new and potential future leaders in the discipline those aspects of IS that distinguish the discipline's standing.

The aims we discuss in this section evolve at the higher levels of consortia (and at main conferences and through publications and in other ways) but are enacted at all levels.

4.3 Developing Research Professionals

Debate has long occurred (Hirschheim & Klein, 2003) about whether one can regard IS as a distinct professional discipline. In Australia, Gable, Gregor, Clarke, Ridley, and Smyth (2008) examined IS's standing in universities across the nation from a perspective of the perceived professionalization of the IS discipline in the country. Gable (2007) has also reported a similar concern for examining the growth of IS's professional status in the context of the Pacific Asia region (Gable, 2007). Such concerns evidence a complex dynamic involving the status of the IS professional knowledge base and its consequence for the discipline's academic legitimacy as they relate to the institutionalized and standardized education of potential new members—in this case, research higher-degree students. Larson describes this dynamic as the "standardized production of producers" (1977, p. 70) via, for example, processes of education and codes of practice. These are the implicit structures of a signature pedagogy that Shulman (2005) describes as a moral dimension. Membership of a profession is, in part, based on access to a level of specialized knowledge, skill, capacity, and competence (Freidson, 2001). According to Freidson, the credibility of professions rests heavily on their joint values and conduct in light of their knowledge and capacity to translate such factors into meaningful and beneficial action. In this respect, the capacity to acquire a body of knowledge is not only connected to how well an individual is socialized into a value system (Evetts, 2013) but also to internal evaluations of competence.

It is in the development of research professionals that the aims of consortia at the four levels are most similar. Doctoral consortia at each level aim to instill in the participating doctoral students the precepts of good research practice. In fact, the founders established the initial ICIS doctoral consortium in large part due to their desire to overcome criticism that IS research at that time lacked the scientific rigor of research in established disciplines. All consortia emphasize research quality using feedback to maximize the quality of the students' research efforts. Objectivity, too, is a common aim, though this aim may be compromised in one respect in local consortia because they strongly encourage principal supervisors to attend their students' session (the rationale for which we mention in Section 3.5). Closely related to the disciplinary aims that we discuss above, this pursuit of quality assurance serves as an internal mode of monitoring and evaluating competence through the scholars' presence. Here, students present their projects at the consortium to senior researchers (the scholars), who are able to articulate research-quality objectives and the work required to achieve them (Macdonald, 1999).

From the beginning, doctoral consortia founders have determined that, at their heart, doctoral consortia should work deliberately to emphasize quality of research as measured by the standards of the established discipline. While consortia at all levels emphasize promoting research quality in the participating students, consortia at lower levels focus relatively less on quality relative to other disciplines and more on promoting a standard of quality relative to the wider IS community.

Professional learning communities and communities of practice, such as those found in consortia, are important sites for evolving a normative professional value system; what constitutes professional activity is defined, controlled, and monitored in the occupational group. IS consortia not only provide learning specific to the needs of the individual participant but also promote learning consistent with agreed norms of the IS discipline. It is this modeling of professional leadership by the scholars that distinguishes the IS consortia's approach as a signature pedagogy. Indeed, not only does the doctoral consortium play a role in acculturating the students into the IS discipline's practices and norms, it provides a collegiate and

evaluative location to promote and progress a common professional knowledge base and its subsequent application.

The IS consortium provides a vehicle for IS scholars to further standardize and formalize IS knowledge as a recognizable discipline not only for theoretical and practice audience but also for further professional unification (Larson, 1977). Nevertheless, we note and welcome the potential value of more critical, theoretical perspectives on this particular dynamic to avoid its inherent risks (e.g., insulating academic knowledge). Readers should consider our theorization of the consortium as an initial foray into a deeper understanding—one that may trigger further consideration and conversation.

In summary, we see the doctoral consortium's main aims and the practices flowing from them as being supported by a range of sound pedagogical principles. Importantly, the close interaction between scholar and student is consistent with theories of learning that view contextual community as vital to the individual's effective learning. Flowing from this interaction are wider principles of developing and operating a community of practice, which are also evident in the doctoral consortium's aims and practices.

In concluding this section, we suggest that consortia at all levels contribute in all ways identified, with some variability as we discuss next At the highest level, ICIS is crucially influential on discipline socialization and leadership, and, more specifically, on socialization in AIS as the guiding professional body. At the regional level, PACIS has historically had less such emphasis largely due perhaps to the lack of a regional AIS or other regional governing entity. However, this situation has begun to change with the restructuring of PACIS Executive in 2014 to align more closely with the AIS.

At the local level, rightly or not, the ISS doctoral consortium has to date not emphasized socialization in AIS (though keynote/invited speakers have included three past AIS presidents); this streamlined event (one day) instead prioritizes students' research progress and quality and the "enactment" of discipline standards. A further reason for ISS's lesser emphasis on discipline socialization is its size and diversity (ISS's three research themes span other national and international academic associations, such as the Australian Library and Information Association (ALIA) (https://www.alia.org.au/) and the Computing Research and Education Association of Australasia (CORE) (http://www.core.edu.au/)). Though ISS has not sought to socialize student delegates in AIS, the event does serve a valuable purpose in socializing delegates in their local communities of practice: the school (ISS), the students' research themes, and their more specific research group.

We are at the same time conscious of the challenges in "scaling up" the offering of this personal attention as the IS community grows. When we look to other disciplines that have adopted doctoral consortia, we see the potential for deviating from the student-scholar model due to growth. For instance, while acknowledging the positive role of the doctoral consortium in marketing, Lazer and Bennett (2011) lament the reduced level of interaction between doctoral students and academics arising from the increase in the numbers of doctoral students participating in the consortia. Whether to some extent a deliberate strategy (e.g., AIS's subsidy to regional consortia (i.e., PACIS)) or happenstance (the local-level ISS doctoral consortium was not introduced as part of some larger multi-level plan), the practice in IS of offering doctoral students a range of doctoral consortia, at international, regional, and local levels seems to have enabled the continuation of close student-scholar interaction in the face of growth in student numbers—yet another endorsement for the trend to distributed levels of doctoral consortia.

5 The Doctoral Consortium as a Formal Expert Review

We now return to the core activity of the IS consortium as defined herein: an event where doctoral students whose work has advanced beyond detailed design present their research for feedback from external scholars who have reviewed advance reports on the work presented. We believe IS consortia are distinctive in their continuing emphasis on the individual student's research and one-to-one interaction with scholars and advocate the discipline to further leverage this advantage.

In recognition of the distinctiveness, value, and formality of IS Consortia, particularly the one-to-one interaction with scholars, we advocate that the substantial and valuable resources (e.g., the time of the chairs, scholars, and students) and effort brought to bear with this signature pedagogy be further leveraged: that the consortium be considered a stage in the PhD student's research approach—a formal expert review of the student's research design. We advocate that students who attend a doctoral consortium consider formally representing the doctoral consortium in their research designs. However, we do not advocate that universities include a doctoral consortium as a formal quality control activity.

Figure 1 depicts the consortium occurring at various alternative stages of the PhD student's logical progression but preferably not before confirmation (though the consortium might precede main data collection; at a minimum, the detailed study design and an early model should be in place). Note that the phases and outputs in the figure are only examples; phases in different paradigms will be: different, more or less readily discernible, and more or less evolutionary or iterative. Regardless, we think this discussion continues to apply.

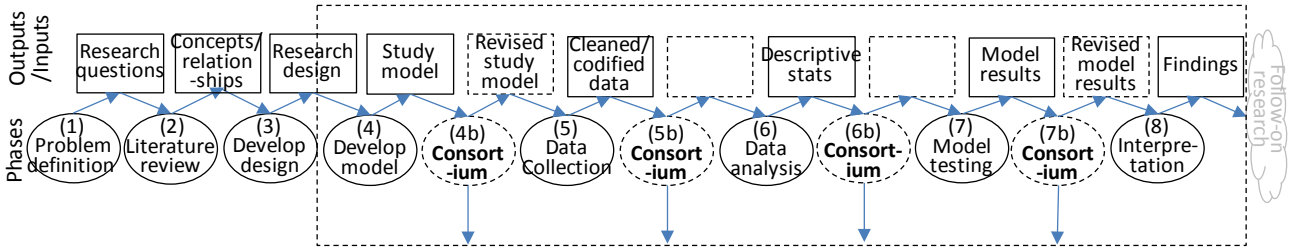


Figure 1. The Evolving Research Design

Figure 1 is novel first because it includes an explicit phase of the research called "develop [research] design", the "output" of which is the research design depicted in the overall figure. Though many theses include a figure similar to Figure 1 in a research design or research methodology chapter, PhD students seldom make explicit the process whereby they developed their research design. Here, we consider the research design a designed artefact. Where one intends to contribute to methodology, the research design is in some sense a design science output, and the research design process is a form of design science research. We see merit in more explicitly and formally considering implications of this conception, which is a core focus of the "research systems" research track from which this paper derives (see acknowledgement at end). As Venable and Baskerville (2012, p. 141) argue, "research methods are designed artefacts". They call for the use of design science research in developing research methodology.

As Figure 1 shows, the consortium may occur at various stages of the PhD student's research progression (possibly due to circumstance and opportunity or perhaps influenced by the style of the research; e.g., later in the cycle for more evolutionary research) and might emphasize issues of particular relevance at a particular stage (e.g., a "revised study model" deriving from a consortium phase following the "develop study model" phase). No matter the stage at which the consortium occurs, it normally involves reflecting on and perhaps revising (or confirming) the study research design, which the arrows pointing down from each alternate consortium phase in the figure reflect. Note that the doctoral consortium is a quality-control phase, which, as Figure 1 depicts, includes both the review activity and the revision activity that results from the review. Though many natural scientists may feel that, once the design has been finalized early in the overall research lifecycle, it should thereafter remain unchanging, many, if not most, social science approaches are either accommodating of, or encourage reflecting on, the research design and its continuing evolution.

Consortium participants might adapt the following sample text for their theses

> *Expert panel review of the research design: The [conference acronym] doctoral consortium*
>
> *The research design was subject to formal expert and peer review at the [conference name] Doctoral consortium ran from [start date] to [end date]. Figure [#] depicts the timing of this review in the overall progression of this research. The doctoral consortium co-chairs [their names] were assisted by additional expert scholars selected for their experience and expertise. Student nominees submitted summaries of their research according to the call for nominations (appended). Student nominees and scholars were aligned in streams in which scholars reviewed the student submissions and in consort with the co-chairs selected a subset of the nominees to participate in each doctoral consortium stream. The expert scholars who reviewed a version of the study design represented in this thesis were [their names and affiliations]. The co-chairs and student peers in the stream further reviewed the research summary in advance of the doctoral consortium. At the doctoral consortium, in addition to other developmental activities, the student formally presented this study over [duration in minutes] minutes, after which related questions and discussion ensued. I [i.e., the student] captured key feedback on the study design through [e.g., notes, buddy; note that recordings are not allowed]. Related discussion*

> *before and after the presentation sessions was also valuable. I summarize that feedback and its implications in the following section. Note that, in accord with ethics clearance and the consortium policy, I do not attribute feedback to any specific individual nor do I document direct quotes.*
>
> *[Feedback and implications, particularly for study design].*
>
> *Other valuable feedback that influenced this study was [other feedback].*

The above wording assumes the thesis submission summarizes the student's full research. Where the emphasis in the student submission to the consortium (and related feedback) is on some part of the thesis effort (e.g., a paper/sub-study in a thesis-by-published-papers), one might appropriate modify the suggested text. When accepted to a consortium, students should explore any specific needs for ethical clearance by their university (such requirements vary substantially). Ethical clearance is only necessary should the student intend to report on the consortium formally in the way described. The example text includes "in accord with ethics clearance and the Consortium policy, feedback is not attributed to any specific individual, nor are direct quotes documented". While consortium policy does vary, the implicit policy reflected in the example text is that scholars be protected by disallowing recordings and direct attributions and quotations to encourage relaxed interaction, openness, and honesty (it is conceivable that a consortium might alternatively encourage recordings and direct attribution and quotations and seek advance clearance from each and every scholar by employing a standard clearance form and publishing completed forms on the consortium's website for student access).

Pragmatic, summary reasons for advocating formally regarding the consortium as an expert panel review of the research design[4] are that it:

- Encourages the consortium chairs and scholars to organize and execute to meet this expectation
- Motivates students to anticipate related value and to have such value in mind when preparing their nomination submission and presentation (if they are selected)
- Increases perceived value of the event and, thereby, encourages more nominations and a higher quality of nominations
- Emphasizes research design and encourages valuable related reflection, and
- Instils rigor and confidence through formal procedures and documentation of the research-design results (as does such formality with all phases of research and with all methods and methodologies).

6 Conclusion

In closing, we began this paper from two quite different impetuses. The first was a rational commitment to document common practices to capture organizational memory and improve consortium efficiency. A second, perhaps less rational, driver fueled and sustained this first more mundane goal: the sense of the consortia's experienced "magic" that both students and faculty have expressed.

We proceeded to document the technical, thought to enliven this with "sample" theory (never intending rigorous evidence collection or defense and, indeed, performed none), had the foresight to probe reactions from a diversity of historical players, and, only gradually along the way, seeded by potent key informant email snippets, begin to sense the true significance of these annual musters and the magnitude

[4] Akin to design science (and consistent with the notion of research design as designed artefact), students may find it useful to consider the evolution of their study design through a series of alpha, beta, and gamma tests. With general reference to the testing of design theory (Carlsson, 2010, p. 223) writes:

> *Alpha testing concerns further development by the originator(s) of the design theory (research design). Beta testing concerns further development by other researchers. Gamma testing concerns testing the design theory (research design) in practice and includes testing whether practitioners (the student researcher) can use it and if the use of the theory leads to the desired outcome(s) (an adequate contribution to knowledge).*

The doctoral consortium and prior confirmation of candidature (at QUT, a formal, public defense of the research design after one year) are examples of beta testing. Final seminar (at QUT, a formal, internal, public defense of the near-final thesis) and external examination (at QUT, examination of the final thesis by two experienced external experts) are examples of gamma testing.

of our task. Though progress has been more than intended, we were daunted by this realization and our maxim became *primum non nocere* (first, do no harm). We hope we have done no harm.

We further hope this paper serves as a catalyst for deeper and more critical thinking. We employ theory that, in many ways, is functionalist in its approach, which nevertheless has given us some insight into the consortium as a potentially significant pedagogy for strengthening the discipline.

We believe our often clinical analysis and reporting of fact adds to IS organizational memory and will make us more efficient, and, though we have only alluded to the "magic" of these events, we hope that sense has permeated this paper as we believe it the main pursuit of these events.

For the IS discipline, we believe consortia are strategic: a centrally important mechanism for sustaining, rejuvenating, and defending the discipline. While ICIS is premier in this role, all levels can play a part. And though all consortia activities are beneficially influential in this way (and in other of the ways described), the core student-scholar interaction facilitates and amplifies these strategic influences.

This paper's contribution to theory lies in our interpreting the doctoral consortium as a pedagogical device. Our analysis of the IS doctoral consortium's explicit and implicit aims and the practices associated with pursuing these aims points to an underlying framework of pedagogical theory—a signature pedagogy.

For educationalists, we theoretically explain the doctoral consortium. The doctoral consortium helps advance the learning of doctoral students, promotes the discipline's development, and helps to build a professional community of practice. The analysis of this practice, from an educational viewpoint, illustrates the fact that contemporary understandings of professional learning uphold the common procedures making up the doctoral consortium. This study points to the potential benefits available to other discipline areas in adopting the doctoral consortium for nurturing their own doctoral research students.

For prospective doctoral consortium students and their supervisors, we surface and clarify the procedures typically involved in a consortium. We make clear the expectations for students. Importantly, with support from pedagogical theory, we highlight the doctoral consortium's potential benefits to the student and supervisor. We provide a basis for student participants to best exploit the potential benefits of the doctoral consortium. The concept of the doctoral consortium as a formal expert review offers student participants the opportunity to cite, in their thesis document and consequent papers, the fact that senior academic scholars and peers at a structured forum have examined and offered feedback on their project design.

For consortium co-chairs, we provide guidelines for planning and conducting a doctoral consortium. Further, we offer rationale and justification for the procedures we recommend. When documented, the magnitude of these events becomes apparent. We are concerned that future organizers and participants in IS consortia are not in any way daunted by any complexities or requirements implied herein. Our analysis in this paper is a retrospective one, and, in essence, we report on what has succeeded with IS consortia. While the AIS may more consciously seek to positively influence the role of the IS consortia through its governance, individual events are largely autonomous, and common sense and the generous spirit of the IS community go a long way to ensuring future events will continue to succeed naturally without complex planning or engineering (rather magician than engineer). Further, we hope to motivate the development of local consortia as part of the consortia ecosystem. In addition to making the consortium experience accessible to more students, these events also make the consortium scholar role accessible to more academics. We only skim the value of this experience to scholars, but we believe it to be central to the notion of IS consortia as signature pedagogy.

While a strictly local (i.e., single school) consortium has several merits (e.g., socialization in the school, school research themes, and specific research groups), larger consortia spanning schools, faculties, or universities have other advantages. Though a local event with as few as two or three student presentations and one or two external scholars is viable and encouraged, the critical mass possible from a pan-university event entails economies of scale and, thereby, spreads out costs (e.g., of visiting scholars and organization/execution effort) and enables activities otherwise not possible. There is merit, too, in organizing other activities aligned with the consortium that involve the visiting scholars and aim to progress local research strategy.

In this paper, we introduce the notion of the research design as a designed artefact. We reiterate Venable and Baskerville's (2012) call for design science research into research methodology (research methodology as design science output)—a direction offering much promise (see Al-Turki (2004) for, a positive example).

6.1 Limitations

This study is limited in the range of IS conferences we examined in relation to the offering of doctoral consortia. Future research could more extensively examine the history of doctoral consortia in the IS discipline in a way similar to that conducted in the marketing discipline, for which Lazer & Bennett, 2011) have compiled a comprehensive history.

Note that PACIS, ACIS, and ISS are only examples of consortia at their respective levels (ICIS being alone at the top). While we feel comparing case examples across the levels has revealed salient and often generic differences (e.g., with PACIS's aims being similar to those of other regional consortia and ACIS's aims being somewhat similar to other national consortia), each regional and national event is unique in various respects.

In example of differences among the regional events, only in the past couple of years has AMCIS moved away from the student-scholar model at the core of consortia as we define it here. They appear to have done so for the same reasons marketing and management consortia have moved away from the student-scholar model: scalability in the face of growing demand for participation from students. We understand they accepted approximately 100 students in 2014 and dispensed with individual student presentations and moved to a more plenary structure (more akin to ICIS's junior-faculty consortium). While we acknowledge the difficulties and the rationale and while their new approach surely has countervailing benefits, we strongly believe in the value of individual student attention as we argue throughout the paper (i.e., the student-scholar model). We suggest possible theoretical rationale for maintaining this approach, but we need further analysis in this direction.

One key informant wrote: "Some might argue these forums are essentially conservative, and by aiming to reduce risk for the student, they reinforce a conservative disciplinary hegemony which is seen as 'safe'". As we argue elsewhere, most consortia expect the student to have arrived at a detailed and coherent design: they should have chosen their problem, questions, and approach. Where scholars discern serious concerns with these givens, constructive and tactful honesty is in the student's best interest. Regardless, the informant's comment suggests a further possibly fruitful direction for future research.

For this paper, we relied heavily on the recollections and views of the primary key informant. We ameliorated this limitation to some extent through the countervailing perspectives of the co-authors, interaction with other past stakeholders, and advance circulation of the draft paper for other key informants' (mostly selected past co-chairs of consortia across the four levels) reaction.

Our evidence is admittedly and necessarily often anecdotal and opportunistic. One key informant wrote: "I believe the consortium experience is positive too. But I've heard damning comments from PhD students who viewed their experience as negative, demotivating, and biased". We do not know to what event they refer, but do know it was not ICIS. While we acknowledge the consortium experience cannot have been universally positive, and we can speculate as to why, exploring this formally was outside our scope and is worthy of more careful attention.

We emphasize the influence of consortia on students and discuss their concomitant possible influence on the discipline. We do not much discuss why co-chairs and scholars volunteer and consortia's influence on them (and, hence, on the discipline). Prestige? Altruism? Reciprocity (it's my turn)? These sound cold. One key informant wrote:

> *It is an opportunity to re-live doctoral education somewhat, but, more important[ly], it is an opportunity for faculty to re-think the nature and role of research. In this way faculty are "students". In fact, when are faculty not students? When they are useless or dead (the latter often guaranteeing the former) [, it] encourages "reflective learning" a la Donald Schön.*

The key informant goes on to acknowledge his own learning through panels and socializing with the other scholars. ICIS has a practice of including co-chairs as scholars the year before they undertake the role to help transfer and continue ICIS's ideals. The informant states:

> *In general, learning from other faculty has been a strong component of the ICIS consortium. Also, even going back to the early days, there were international students at ICIS…and we have continued to be good friends to this day, continuing to learn from each other.*

We regret our limited attention to the important influence of consortia on the scholars that attend, which we note at all levels. We need further attention ideally to capture the richness so often apparent for scholars and students alike.

Though we have made substantial effort to compile IS consortia's history, the detail reported is incomplete (e.g., "?"s in Appendices C and E) and will quickly become dated (e.g., though written in 2016, Appendices C, D, and E do not include 2015 data). To help the IS discipline to continually capture relevant descriptive history in relation to IS consortia, we invite the IS community to maintain and grow their Wikipedia pages.

Lastly, we hope we have fulfilled the first author's commitment to facilitate PACIS's (and, thereby, AIS's) organizational memory to some degree. Beyond doctoral consortia, we offer a framework for follow-on work to similarly document the role of the IS conference—a more complex activity perhaps usefully partitioned into "conference management" and "program management".

6.2 Future Directions

In closing, we return to the advent of the first ICIS doctoral consortium in 1980, which occurred during a time in which other disciplines questioned IS's status as a legitimate academic discipline. At that time, the adversary was obviously other disciplines and their perceived higher standards of professionalism. Today there is a different adversary, and again we see the consortium as a possible vehicle of discipline reinforcement. The challenge today is from de-professionalization, a challenge facing all academic disciplines to varying degrees. We sense a growing tension between the disciplines and institutions that seek increased allegiance from individuals in the face of increasingly demanding organizational KPIs and new directions. That strong institutional pull demands that disciplines better communicate their value proposition and reconsider opportunities for reinforcing and strengthening the values, beliefs, and codes that have underpinned IS research. This is a complex, recent, and potent development demanding further research scrutiny.

A further possible concern that will continue into the future is the criticism directed at doctoral consortia in accounting (Fogarty & Jonas, 2010). Fogarty and Jonas argue that the goal of socializing doctoral students to their discipline has been corrupted in the sense that the American Accounting Association's doctoral consortium has come to promote a core of universities associated with the consortium as elite at the expense of other institutions through what Fogarty and Jonas describe as a "stratification hierarchy". We found no evidence of any equivalent institutional elitism promoted through IS consortia perhaps because of the large range of academics and institutions represented across the many consortia offered. Again, the proliferation and diversification of doctoral consortia being offered may serve to minimize this risk.

Though the continuation of the doctoral consortium as an effective promoter of the interests of doctoral students and the IS discipline seems assured, some evidence suggests that aspects of the organization and conduct of consortia may continue to evolve. We advocate growing the IS doctoral consortium ecosystem to include more local events. While the international and regional consortia have worked especially well (given the smaller past community, they had greater relative reach), we believe wider exposure to the consortium experience is in the discipline's (and individuals' (i.e., students and scholars) best interests. Gable and Smyth, (2007) suggest a possible vehicle of such growth: an AISWorld faculty directory ("representatives hierarchy"[5]), and they include in their paper a detailed implementation plan[6]. Though they focus mainly on attaining a current and complete directory of IS academics worldwide[7], one could mobilize such a hierarchy of representatives to facilitate local consortia and promote and reinforce the discipline.

[5] We recognize this may be perceived as somewhat bureaucratic but believe it is necessary given the perceived datedness of much content in the existing AIS faculty directory (see http://aisnet.org/?FacultyDirectory). We also believe that such a network would have value beyond the directory.
[6] The appendix in Gable and Smyth (2007) refers only to a network of country representatives. An earlier, unpublished version of the plan also refers to institution representatives and defines the respective roles.
[7] We believe the AIS faculty directory at http://directory.aisnet.org/ is sorely out of date, incomplete, and much more important than its state reflects. We have some authority to comment here, the first author and Roger Clarke having in 1994 championed the Asia Pacific directory of information systems researchers, which, in 1999, merged with the European and Americas directories to form the AIS faculty directory.

Acknowledgments

We conducted this research with the assistance of the Australian Research Council (ARC) grant DP150101022 “Towards Engineering Behavioral Research Design Systems” on which Guy Gable was First Chief Investigator, Alison Gable Associate Investigator, and Bob Smyth Research Associate. Also Karen Stark, whose careful scrutiny and incisive feedback has, as always, been of central value.

References

ACPHIS. (2012). ACIS Charter (Ver 3.6). Retrieved from http://www.acphis.org.au/index.php/documents

AIS. (n.d.). *ICIS terms of reference*. Retrieved March 16, 2016, from http://aisnet.org/?ICISTermsOfReference

Alturki, A. (2014). *DSR-roadmap—a design science research methodology: Harmonizing, extending and validating contemporary methodological thought* (unpublished thesis). Queensland University of Technology, Brisbane, Queensland, Australia.

Avison, D., Kautz, K., Sigala, M., Whitley, E., & Winter, R. (2005). Becoming engaged with conferences: Reputations and networks. *Communications of the Association for Information Systems*, *16*, 895-903.

Benbasat I., & Weber, R. (1996). Research commentary: Rethinking "diversity" in information systems research. *Information Systems Research*, *7*(4), 389-399.

Bruner, J. (1996). *The culture of education*. Cambridge, MA: Harvard University Press.

Carlsson, S. A. (2010). Design science research in information systems: A critical realist approach. In A. Hevner & S. Chatterjee (Eds.), *Design research in information systems* (pp. 209-233). New York: Springer.

Dearden, J. (1972). MIS is a mirage. *Harvard Business Review*, *50*(1), 90-99.

Dewey, J. (1938) *Experience and education*. New York: Collier Books.

Evetts, J. (2013). Professionalism: Value and ideology *Current Sociology Review*, *61*(5-6), 778-796.

Fogarty, T. J., & Jonas, G. A. (2010). The hand that rocks the cradle: Disciplinary socialization at the American Accounting Association's Doctoral Consortium. *Critical Perspectives on Accounting*, *21*(4), 303-317.

Freidson, E. (2001). *Professionalism: The third logic*. Chicago: University of Chicago Press.

Gable, G. G. (2007). The information systems academic discipline in Pacific Asia 2006: A contextual analysis. *Communications of the Association for Information Systems*, *21*, 1-22.

Gable, G. G. (2008). The information systems discipline in Australian universities: A contextual framework. In G. S. Gable, S. Gregor, R. Clarke, G. Ridley, & R. Smyth (Eds.), *The information systems academic discipline in Australia* (pp. 3-45). Canberra, Australia: ANU E-Press.

Gable, G. G., Gregor, S., Clarke, R., Ridley, G., & Smyth, R. (Eds.). (2008). *The information systems academic discipline in Australia*. Canberra Australia: ANU E-Press.

Gable, G. G., & Smyth, R. W. (2007). The state of the IS academic discipline in Pacific Asia: Methodological learnings. *Communications of the Association for Information Systems*, *21*, 166-194.

Gillet, D., Helou, S. E., Joubert, M., & Sutherland, R. (2009). *Science 2.0: Supporting a doctoral community of practice in technology enhanced learning using social software*. Paper presented at the Science 2.0 for Technology Enhanced Learning Workshop.

Golde, C. M. (2007). Signature pedagogies in doctoral education: Are they adaptable for the preparation of education researchers? *Educational Researcher*, *36*(6), 344-351.

Hirschheim, R., & Klein, H. (2003). Crisis in the IS field? A critical reflection on the state of the discipline. *Journal of the Association for Information Systems*, *4*(5), 237–293.

Larson, M. S. (1977). *The rise of professionalism: A sociological analysis*. Berkeley, CA: University of California Press.

Lave, J. (1991). Situating learning in communities of practice. In L. Resnick, J. Levine, & S. Teasley (Eds.), *Perspectives on socially shared cognition* (pp. 63-82). Washington, DC: American Psychological Association.

Lazer, W., & Bennett, P. D. (2011). Reflections on the American Marketing Association Doctoral Consortium. *Journal of Historical Research in Marketing*, *3*(2), 251-260.

Long, K. A. (2007). Nursing PhD consortia: A model for maximizing scarce resources. *Journal of Professional Nursing*, *23*(5), 262-266.

Macdonald, K. M. (1999). *The sociology of the professions*. London, UK: Sage.

Mingers, J., & Stowell, F. (Eds.). (1997). *Information systems: An emerging discipline?* Berkshire, UK: McGraw-Hill.

Musselin, C. (2007). *The transformation of academic work: Facts and analysis*. Berkeley, CA: Centre for Studies in Higher Education.

Pacific Asia Conference on Information Systems. (n.d.). In *Wikipedia*. Retrieved 16 March, 2016, from https://en.wikipedia.org/wiki/Pacific_Asia_Conference_on_Information_Systems

Piaget, J. (1977). *The essential Piaget* (H. E. Gruber & J.J. Voneche, eds.). New York, NY: Basic Books.

Ridley, G. (1996). Focusing information systems post-graduate research projects. *Australasian Journal of Information Systems*, *4*(1), 80-89.

Seashore Louis, K., & Kruse, S. D. (1995). *Professionalism and community—perspectives on reforming urban schools*. London, UK: Sage.

Shulman, L. S. (2005). Signature pedagogies in the professions. *Daedalus*, *134*(3), 52-59.

Slater, C., Brown-Welty, S., Cohn, K., & Rodriguez, J. (2009). Signature pedagogy in California State University educational doctorates. *Educational Leadership and Administration: Teaching and Program Development, 21*, 87-99.

Tremblay, M.-A. (1957). The key informant technique: A nonethnographic application. *American Anthropologist*, *59*(4), 688-701.

Venable, J., & Baskerville, R. (2012). Eating our own cooking: Toward a more rigorous design science of research methods. *The Electronic Journal of Business Research Methods*, *10*(2), 141-153.

Vygotsky, L. S. (1978) *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Wenger, E. (1999) *Communities of practice: Learning, meaning, and identity*. Cambridge, UK: Cambridge University Press.

Whitley, R. (2007). Changing governance of the public sciences. In R. Whitley & J. Glaser (Eds.), *The changing governance of the sciences* (pp. 3-27). Dordrecht: Springer.

Appendix A: 1st Key Informant Experience of Doctoral Consortia

Table A1. First Key Informant Experience of Doctoral Consortia

		Co-Chair[a]	Scholar	2017[c]	2016[d]	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	2998	1997
Consortium																								
International	ICIS	1	1	C	S																			
Regional	PACIS	4	7		C		S	C	S			S	S			S	S	C	S		C			
National	ACIS	2	6			S					C	S		C			S	S		S				S
Count:		**7**	**14**																					
Local[b]	ISS	9	0	?	C	C	C	C	C	C	C	C	C											

a) Co-chair with: Varun Grover (2017), Eric Wang (2016), Youngjin Yoo & Wai Fong Boh (2013), Iris Vessey (2010), solo (2007), KK Wei (2003), Ryutaro Manabe (2000)

b) ISS (Chair)… Information Systems School annual Doctoral Consortium, Science and Engineering Faculty, Queensland University of Technology

c) Discussions in-train with co-Chair ICIS (2017) Varun Grover; 2017 co-chairs are by definition scholars (2016)

d) See Appendix H for sample draft PACIS 2016 call-for-nominations (CFN)

Appendix B: Chronology of Key Milestones and Activities

This appendix details key milestones and activities associated with most consortia. These are only representative. Any individual consortium may vary substantively from this example.

Important Milestones

Initial key dates of relevance are: 1) timing of the prior year doctoral consortium (should not advertise the new event until after the prior event), and 2) timing of the associated conference: the doctoral consortium typically happens immediately prior. Subsequent main milestones of relevance are: 3) call for nominations complete and advertised, 4) nominations deadline, 5) acceptance notifications, and 6) the doctoral consortium. Finer milestones will pertain to such things as sub-activities of the nomination evaluation process and early-bird student registration for the main conference (further evidence of commitment to attend).

6.3 Activities

Table B1 below depicts the approximate timing of key activities and milestones in the 24 months preceding a scheduled doctoral consortium. The main activities/milestones include:

1. **Recruit consortium co-chairs**: typically, one or more co-chairs of the consortium must be recruited and included in the bid document to host the conference. Recruiting co-chair(s) is the responsibility of the bid conference chair(s) and possibly other committee members already confirmed. Note that winning bids are generally approved one to several years in advance of the event dependent on the conference (the chart assumes 24 months prior; if longer, little happens more than 24 months prior).
2. **Approximate size and budget**: the size of the consortium and its budget are closely aligned. Size may be fixed by convention (e.g., based on fixed number of students/scholars) or may be tentative based on a draft conference budget. Size may be 1) fixed by conference policy, 2) constrained by resources (e.g., rooms available, main conference subsidy/sponsorship), and/or 3) a function of the number of student nominations (which is to some extent a function of promotion). Event duration needs also to be set, which impacts the number of students, streams, scholars, rooms, room days, and so on. One should be conservative until the budget is firmer. Scholars are most often happy to shoulder their own costs but welcome any subsidy possible after the event.
3. **Recruit scholars**: draw on personal contacts, academics that have previously performed this role, and senior academics likely to be attending the conference. The aim is often to achieve a balance of international experts in combination with experts from the area serviced by the event (e.g., region, nation)[8]. Relate numbers sought to likely number of parallel streams. One can have too few but cannot really have too many. Co-chairs can be held in reserve as backups.
4. **Prepare the call for nominations (CFN):** the CFN is the primary vehicle for advertising the event and attracting appropriate nominees. Main messages include event aims, eligibility, nomination/acceptance procedures, key dates, event schedule (if known), event quality (mainly communicated by listing scholars), registration, and costs (see Appendix F for more detail on the CFN). See Appendix G for a sample draft CFN.
5. **Milestone—advertise**: it is common courtesy not to advertise until after the preceding event. Flyers at the preceding conference following the preceding consortium are appropriate. ISWORLD is the main vehicle. Regional events often use regional and local email lists. Hardcopy flyers at events are common (e.g., at the prior year's conference with which the consortium is aligned). Targets obviously include students but also supervisors and heads of discipline. Emails to personal contacts of scholars can be effective at stimulating interest. Repeat in the months preceding the nomination deadline.
6. **Recruit local arrangements chair (LAC):** the LAC is normally recruited/assigned by the conference committee, which is logically someone local.

[8] Unlike IS, who has, in our estimate, altruistically succeeded in promoting meritocracy, other disciplines have been accused of nepotism (Fogarty & Jonas, 2010). One should avoid too incestuous a process in selecting potential academic scholars.

7. **Manage logistics:** logistics are the responsibility of the LAC with close involvement of the co-chairs (may be the co-chairs if they are local). Responsibilities may include booking the room and equipment; organizing technical support for the event; facilitating scholar/student accommodation; organizing all refreshments, meals, and any entertainment; and producing materials (e.g., see #16). The LAC may also have some responsibility for maintaining records and communicating with scholars/students, though this may more effectively be a responsibility of the co-chairs.
8. **Milestone—nomination deadline**: this is set as close to the event as possible to maximize nominees while allowing sufficient time for evaluation and notification and, thereafter, funding arrangements and travel planning. It tends to be four to five months prior to the event.
9. **Maintain detailed records**: accurate records must be kept throughout on scholars, nominees, acceptances, submissions, assignments, registrations, contact details, status, and so on.
10. **Assign nominations**: allocate students to groups and scholars to student groups. One can do this randomly, the resultant heterogeneity being beneficial in some sense, but more often the aim is semi-homogenous alignment of student and scholar foci in a group. Such alignment can only be achieved to an extent and may be based on problem domain, method/paradigm, or even context.
11. **Evaluate nominations**: procedures for evaluating vary. It may be done entirely centrally by co-chairs. An effective means of distributing decision making and effort is to request that scholars individually evaluate and rank those in their stream. The co-chairs can then compare ranks and finalize acceptances. Whether the scholars are involved in selection or not, their careful advance review of student reports in their stream is core to the consortium approach.
12. **Milestone—acceptance notification:** given appropriate prior organization, advertising acceptances one month subsequent to receipt of nominations should suffice. Thus, students know of acceptance three to four months in advance of the consortium, three months being a practical minimum given funding, travel, visa, and other arrangements (though two months is workable). Funding for some may be contingent on a paper being accepted in the main conference program, which suggests some possible merit in aligning consortium deadlines/notifications with the related conference paper-submission dates.
13. **Design program**: one approach to further facilitate student support from their home institutions is to allow students the option of having their accepted consortium submission included in the main conference proceedings as a research-in-progress (RIP) paper[9], perhaps entailing a RIP poster session in the main conference[10]. Some may welcome this; others may eschew this because they may have concerns with revealing their work too widely too early. Regardless, the program of student presentations (and other activities) must be finalized and final materials circulated. If papers are to be published as RIPs, coordination with the program committee is required. The consortium may be responsible for managing a revision round, based on scholars'/the co-chair's feedback and final formatting requirements of the main program.
14. **Manage student reviews:** approaches to peer reviewing of submissions vary. One practice that balances possible confidentiality concerns with maximizing feedback is to circulate the student submissions only in the stream. Students may need to review the work of their peers in

[9] Including student nomination documents as research-in-progress (RIP) papers in the main conference proceedings is an increasingly common practice. An effective related arrangement is creating a separate track in the program for the consortium submissions. A further effective arrangement is scheduling poster sessions for all published consortium submissions, an increasingly common practice with research-in-progress papers. Benefits of treating consortium submissions as RIPs include: 1) may facilitate student submissions and management through the main conference program software; 2) benefits from predefined RIP format and review procedures; 3) a possible RIP in proceedings is a strong motivator of nominations; 4) a RIP in proceedings is an important criteria for financial support from home institutions for many students, and 5) RIP and poster session are further valuable means of feedback. Note that not all students/supervisors will value/welcome such wider exposure at this stage of the research (confidentiality or other sensitivity concerns). Thus, publication/posters of student submissions must either be mandated up front as a condition of nomination/acceptance or made optional.

[10] A key theme that surfaces sporadically throughout this papers concerns confidentiality/anonymity, which is not something that has normally in the past been given adequate explicit advance attention in consortium planning and design but which we think has become more important due to the growing treatment of student submissions as research-in-progress papers. This concern for confidentiality and anonymity is amplified by our advocacy of the consortium as a formal expert panel. We recommend that such advance consideration of confidentiality and anonymity issues be explicitly exercised by all involved in organizing doctoral consortia.

their stream, which a requirement that they submit brief feedback for each peer in their stream in advance of the event may encourage and evidence. Alternatively, this feedback may be submitted centrally and only given to the students following their presentation.

15. **Milestone—early bird registration:** required of the students; aims to gain further commitment to attend and avoid any holes in the consortium program.

16. **Produce materials:** various materials are required and may include: the program, A3 posters with photos of all involved (a nice touch), information-packs for scholars, information-packs for students, etc.

17. **Milestone—doctoral consortium:** run the event. While the co-Chairs will oversee this, the LAC will have a large role at this time with responsibility for rooms, equipment, technical support, facilities, etc.

Table B1. Approximate Timing of Key Activities and Milestones

			Approximate months prior to consortium																							
Key activities & milestones		**Who**	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
Recruit DC co-chairs	**1**	CC																									
Approximate size & budget	**2**	CC																									
Recruit scholars	**3**	DCC																									
Prepare CFN	**4**	DCC																									
Advertise	**5**	DCC																									
Recruit LAC	**6**	CC																									
Logistics	**7**	LAC																									
Nomination deadline	**8**	DCC																									
Maintain detailed records	**9**	DCC																									
Assign nominations	**10**	DCC																									
Evaluate nominations	**11**	DCC & Scholars																									
Acceptance notification	**12**	DCC																									
Design program	**13**	DCC																									
Manage student reviews	**14**	Students																									
Student earlybird registration	**15**	Students																									
Produce materials	**16**	DCC																									
Doctoral consortium	**17**	All																									
CC = conference committee; DCC = DC chair(s) and possibly a DC local arrangements chair (LAC)																											

Appendix C: ICIS Doctoral Consortium History

Table C1. ICIS Doctoral Consortium History

	1	2	3	4	5	6	7
Year	**1980**	**1981**	**1982**	**1983**	**1984**	**1985**	**1986**
Country	USA	USA	USA	USA	USA	USA	USA
City	Philadelphia	Cambridge	Ann Arbor	Houston	Tucson	Indianapolis	San Diego
Length							
Students	?	?	20	20	?	20	?
Chair(s)	RDHackathorn	MLBariff	IBenbasat	MAJenkins	DCouger	JEmery	DMason
	8	9	10	11	12	13	14
Year	**1987**	**1988**	**1989**	**1990[a]**	**1991**	**1992**	**1993**
Country	USA	USA	USA	Denmark	USA	USA	USA
City	Pittsburgh	Minneapolis	Boston	Copenhagen	New York	Dallas	Orlando
Length	3 days	3 days[c]	3 days	3 days[c]	3days	3 days[c]	3 days[c]
Students	25	?	25	40[b]	42	40[b]	40[b]
Chair(s)	HCLucasJr	JLMcKenney	EBurton Swanson	BIves, HSol	JLKing	GLDeSanctis	JCourtney KLyytinen
	15	16	17	18	19	20	21
Year	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**
Country	Canada	Netherlands	USA	USA	Finland	USA	Australia
City	Vancouver	Amsterdam	Cleveland	Atlanta	Helsinki	Charlotte	Brisbane
Length	3 days	3 days[c]	3 days	3 days[c]	3 days[c]	3 days[c]	3 days[c]
Students	40[b]	40[b]	40	40[b]	40	40	40
Chair(s)	RGalliers SRivard YWand	MAlavi, MNewman	WOrlikowski RWeber	PEin-Dor, BRKonsynski HJWatson	SJarvenpaa MSaaksjarvi	HKrcmar JElam	RJeffery, MLundeberg IVessey
	22	23	24	25	26	27	28
Year	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**
Country	USA	Spain	USA	USA	USA	USA	Canada
City	Louisiana	Barcelona	Seattle	Washington	Las Vegas	Milwaukee	Montreal
Length	3 days[c]	3 days[c]	3days	3 days[c]	3 days[c]	3 days	4 days
Students	40[b]	40[b]	40	40[b]	40	40	40[b]
Chair(s)	PTodd DTe'eni	CCiborra KKumar	JGeorge JMooney	CSauer TMukho-padhyay	DGoodhue RHirsch-heim	PDe CSoh	HBarki YChan
	29	30	31	32	33	34	35
Year	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
Country	France	USA	USA	China	USA	Italy	New Zealand
City	Paris	Phoenix	St. Louis	Shanghai	Orlando	Milan	Auckland
Length	4 days	?	2 days	4 days	3 days	2.5 days	2.5 days
Students	40	40	40	40	40	40	40
Chair(s)	DGalletta CRolland DTruex	SRam DVogel	VSamba-murthy BTan	RKauffman JKLee	JValacich, SSieber	RAgarwal, CAvgerou, PSeddon	SGregor, GFitzgerald

a) In approximately 1990, a decision was made to double the number and accept 20 from North America and 20 from the rest of the world (Izak Benbasat)

b) Though we don't have confirmation, we assume approximately 40 students in each of these years

c) Though we don't have confirmation, we assume approximately three days in each of these years

Appendix D: PACIS Doctoral Consortium History

Table D1. PACIS Doctoral Consortium History

	1	2	3	4	5	6
Year	**1993**	**1995**	**1997**	**2000**	**2001**	**2002**
Country	Taiwan	Singapore	Australia	Hong Kong	Korea	Japan
City	Kaohsiung	Singapore	Brisbane	Hong Kong	Seoul	Tokyo
Length	n/a	n/a	1 day	1 day	1 day	1 day
Students	n/a	n/a	13	21	13	22
Chairs(s)	n/a	n/a	RManabe, GDavis	RManabe, GGable	ASrinivasan, HMChung	Chung, Lee
	7	8	9	10	11	12
Year	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**
Country	Australia	China	Thailand	Malaysia	New Zealand	China
City	Adelaide	Shanghai	Bangkok	Kuala Lumpur	Auckland	Suzhou
Length	1 day	1 day	1 day	1 day	1 day	1 day
Students	15	16	16	16	18	20
Chairs(s)	KKWei, GGable	PChau, OChen, PSeddon	KALim, JThong	ABharadwaj, BYen	CUrquhart, CSoh	CLSia, DVogel
	13	14	15	16	17	18
Year	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
Country	India	Taiwan	Australia	Vietnam	Korea	China
City	Hyderabad	Taipei	Brisbane	Ho Chi Minh	Jeju Island	Chengdu
Length	2 days	2 days	1.5 days	1.5 days	1.5 days	2 days
Students	no record	29	22	16	22	20
Chairs(s)	PGoes, SGregor, ASundararajan	MHHuang, DStraub, EWang	JNLee, JYMao	JThong, TBDinh	YYoo, GGable, BWFong	CLuo, CLSia, DXu

Appendix E: ACIS Doctoral Consortium History

Table E1. ACIS Doctoral Consortium History

	1	2	3	4	5	6
Year	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Country	Australia	Australia	Australia	Australia	Australia	Australia
City	Brisbane	Melbourne	Perth	Hobart	Adelaide	Sydney
Length	?	?	1 day	1 day	1 day	1 day
Students	?	30+[b]	?	?	?	?
Chair(s)	?	RSmith	PMarshall	MVitale	MBroadbent	MO'Connor
	7	8	9	10	11	12
Year	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**
Country	NZ	Australia	Australia	Australia	Australia	Australia
City	Wellington	Brisbane	Coffs Harbour	Melbourne	Perth	Hobart
Length	1 day	1 day[a]	1 day	1 day	1 day	1 day
Students	?	24	32	23	29	28
Chair(s)	B McQueen	MMyers	KDampney	MMetcalfe	GPervan	SHuff
	13	14	15	16	17	18
Year	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
Country	Australia	Australia	Australia	Australia	Australia	Australia
City	Sydney	Adelaide	Toowoomba	Christchurch	Melbourne	Brisbane
Length	2.5 days	1.5 days	1.5 days	1 day[a]	1 day	2 days
Students	?	18	21	20	25	18
Chair(s)	IHawryszkiewycz	JFisher	GGable	MMyers	FBurstein	IVessey GGable
	19	20	21	22	23	
Year	**2011**	**2012**	**2013**	**2014**		
Country	Australia	Australia	Australia	NZ		
City	Sydney	Geelong	Melbourne	Auckland		
Length	1.5 days	1.5 days	1.5 days	1.5 days		
Students	20	20	20	20		
Chair(s)	PHyland, WBandara, KRiemer	CUrquhart MRosemann ARouse	BCorbitt FBurstein DBunker	ATechatassan- asoontorn AMills		

a) Welcome reception the prior evening

b) Based on photo from Frada Burstein

Appendix F: QUT Information Systems School (ISS) Consortia 2008-2014

Mainly to extend the doctoral consortium experience to more local PhD students and perhaps repeat such experiences throughout enrolment, single IS scholars, faculties, or even groups of schools across multiple faculties and universities have more recently increasingly begun to run IS doctoral consortia unaffiliated with any conference. In example, Information Systems School (ISS) at Queensland University of Technology (QUT) has run such a one day event annually since 2008.

ISS is a large school of approximately 30 academic staff, with research (in 2015) organized around three main research themes: 1) business process management (BPM), 2) services science (SS), 3i) information ecology (IE). The school has approximately 80 higher degree research students (HDRs) (PhD, professional doctorate, research masters) of which 50 percent are international 50 percent are Australian. The thesis is a British style of three years duration with about one semester of research training (a second semester of coursework for professional doctorates). In practice, PhDs on average take about three-and-a-half to four years to complete.

Though there has been encouragement from some staff to mix students across the three school themes (BPM, SS, and IE) to encourage wider awareness and possible cross-theme collaboration, the organizers have resisted such a change, with streams in the local consortium continuing to be organized around the themes. This preference for semi-homogeneity is consistent with typical conference-linked consortia organization, which better facilitates alignment of scholar expertise with student topics and approaches.

The consortium at QUT commenced formally in 2008 with the then IT professional services research concentration of the IS school and eight students (this group is currently subsumed in "information ecology" as "information ecology A"). From its outset, the consortium has sought two external scholars for each participating stream, which in 2008 were Andrew Burton-Jones (University of Queensland) and Wuigee Tan (University of Southern Queensland). The consortium extended to the full school in 2010, with four parallel streams in 2010 through 2014 (three in 2012), and 24, 27, 25, 23, and 23 student presentations in each of these years, respectively. Note that the current three ISS research themes have existed only since 2012. Table F1 following details these arrangements by year and indicates student numbers and keynote and invited speakers. Table F2 lists all ISS external scholars from 2008 to2014. Table F3 is a sample schedule based on the 2014 event.

Table F1. QUT Information Systems School Doctoral Consortia (ISS)

Note	Stream	Theme (e)	2008	2009	2010	2011	2012	2013	2014
			6 Nov	23 Nov	17 Nov	12 Jul	23 Nov	22 Nov	21 Nov
			Number of students						
	IT professional services	IE	8	6	6	6			
	Information studies				5				
	Organizations & systems				6	6			
(a)	Information ecology (A)						9	5	6
	Information ecology (B)							6	6
(b)	BPM	BPM			7	10	8	6	6
(c)	Mobile/social	SS				5			
	Services science						8	6	5
	Total students		8	6	24	27	25	23	23
(d)	Keynote speaker			Shirley Gregor ANU	Dirk Hovorka BondU	Andrew Burton-Jones UQ	Michael Myers UA	Kai Riemer USydney	Ron Weber MonashU

Table F1. QUT Information Systems School Doctoral Consortia (ISS)

	Invited speaker	Paul Chapman Accenture	Paul Chapman Accenture	Doug Vogel CityUHK	Paul Burnett QUT

a) The current 3 ISS research themes have existed since 2012. Information Ecology (IE) subsumes several predecessor areas.

b) The BPM research group has existed since 2004, like IE and SS becoming a research 'theme' of the School/Faculty in 2012.

c) The Services Science (SS) research theme, created in 2012, combined mobile and social research with new services research.

d) ANU = Australian National University; City UHK = City University of Hong Kong; QUT = Queensland University of Technology; UQ = University of Queensland; UA = University of Auckland.

e) Though in fact referred to by ISS as “disciplines”, termed “themes” here to avoid confusion with prior use of “discipline”.

Table F2. QUT ISS External[(a)] Scholars 2008-2014

Aaron Tan	U. Melbourne	Marta Indulska	U. Queensland
Abelardo Pardo	U. Sydney	Mary Tate	Victoria U. of Wellington
Alan Burton-Jones	UNSW	Michael Myers	U. Auckland
Asif Gill	UTS	Olivera Marjanovic	U. Sydney
Benoit Aubert	Victoria U. of Wellington	Pan Shan Ling	National U. of Singapore
Colin Fidge	QUT	Patrick Finnegan	UNSW
Daniel Beverungen	U. Münster	Paul Roe	QUT
Deborah Bunker	U. Sydney	Peter Green	U. Queensland
Dirk Hovorka	Bond U.	Peter Macauley	RMIT
Doug Vogel	City U. of Hong Kong	Peter Seddon	U. Melbourne
Eph McLean	Georgia State U.	Rajeev Sharma	U. Wollongong
Erhan Kozan	QUT	Ron Weber	U. Monash/U. Queensland
Gillian Oliver	Victoria U. of Wellington	Shazia Sadiq	U. Queensland
Glen Murphy	QUT	Shirley Gregor	ANU
Graeme Shanks	U. Melbourne	Tony Pettitt	QUT
Hilary Hughes	QUT	Uwe Dulleck	QUT
Kai Riemer	U. Sydney	Walter Fernandez	UNSW
Karl Kautz	U. Wollongong	Wuigee Tan	U. Southern Queensland
Ken Stevens	UNSW	Xiaofang Zhou	U. Queensland
Louise Limberg	U. Borås and U. Gothenburg		

a) Scholars from QUT are external to the IS school

Table F3. QUT ISS (Sample One-day Event) Doctoral Consortium

Mins	Time	Who	Stream	Topic
30	8:30			**Coffee**
15	9:00	Co-chairs	Plenary	Introduction/overview
30	9:15	Invited Speaker	Plenary	TBA
45	9:45	Keynote Speaker	Plenary	TBA
30	10:30		Plenary	**Coffee**
45	11:00	Student 1	4 streams	TBA
5				*Break*
45	11:50	Student 2	4 streams	TBA
5				*Break*

Table F3. QUT ISS (Sample One-day Event) Doctoral Consortium

50	12:40		Plenary	**Lunch**
45	13:30	Student 3	4 streams	TBA
5				*Break*
45	14:20	Student 4	4 streams	TBA
5				*Break*
30	15:10		Plenary	**Coffee**
45	15:40	Student 5	4 streams	TBA
5				*Break*
45	16:30	Student 6	4 streams	TBA
5				*Break*
10	17:20			End
15	17:30		Plenary	**Group photo**
	17:45		Plenary	**Cocktails**
	19:30			Close

Appendix G: The Call for Nominations (CFN)

Communication with the scholars, students, the discipline broadly (e.g., advertising), the conference committee, and the local arrangements chair is the co-chair's main task. The call for nominations is perhaps the main and most formal communication that the co-chairs prepare. The call for nominations' main content includes:

1) Consortium's purpose. For example "The consortium provides a unique opportunity for doctoral students in information systems to present their research to an audience of peers and senior faculty in a sharing, supportive environment, and participate in several plenary sessions with senior information system academics".

2) Important dates: conference dates, consortium dates, nomination deadline, notification of acceptance.

3) Nomination eligibility: language proficiency (e.g., English), preferred stage of progression (e.g., post-confirmation), regional preferences (if any), maximum nominees from a single institution (e.g., 1), endorsement required from home institution[11] (i.e., that they are the institution's selected nominee).

4) The nomination submission requirements[12]

   a. Nominee details

   b. Nomination endorsement details

   c. The sole-authored research report[13], which should outline the research topic, research question(s), theoretical foundations, proposed methodology, progress, current stage of the research, and plans for completion (it isn't advisable to be much more specific than this given the diversity of kinds of research being pursued by IS PhDs). The length expectation can vary from 2000-5000 words, recently more often defined by the requirements of research-in-progress papers (e.g., ICIS 2015 stipulate 10 pages 10pt double-spaced or about 4000 words excluding tables, figures, references, cover page; ISS 2015 stipulated 2500 words excluding references. A main reason for constraining length is to contain the workload of volunteer scholars who typically have to review five to eight such reports.

5) Consortium co-chairs and scholars: list

6) Confidentiality: recognizing that exposure of early work may be perceived as either opportunity or concern, the CFN should include a clear statement of the extent of exposure involved. Avenues of possible exposure beyond co-chairs and scholars (who implicitly and ethically endorse and enforce any constraints adopted by the consortium) include: 1) student peers in stream, 2) students in other streams, and 3) research-in-progress (RIP) publication/poster in main proceedings (see discussion Appendix B on RIPs).

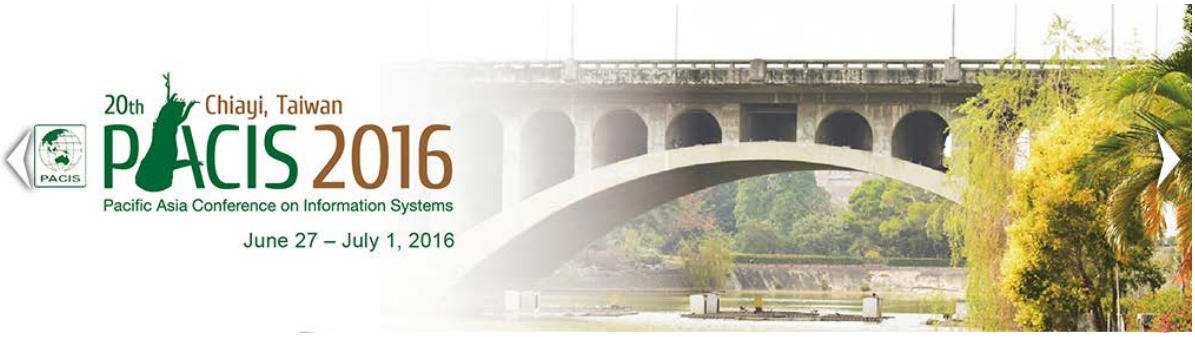
7) Registration and costs: while there is generally no/low registration required for the consortium itself (it is normally subsidized by the main conference and sponsors), students accepted are often required to register (at student rate) for the main conference, which ensures the student gains maximum benefit from attendance. Registering is also important evidence of a student's commitment to attend. It is normally expected that student travel-related costs and conference registration are covered by their home institution.

[11] In the interests of being equitable (and to maximize the student's networking opportunities), consortia commonly stipulate that they will consider only a single nominee per institution. A looser constraint, which also clearly shifts onus to the nominating institution to resolve internal contention for nomination, is to use the language: "Given more than one nomination from any single institution, we require that you rank the nominees. Note that first-ranked nominees will have equal chance against other first ranked or sole nominees. A second ranked nominee would only be considered after all first ranked/sole nominees.".

[12] The consortium may supply a document template that specifies all detailed expectations in terms of presentation (could be the RIP template for the main conference).

[13] Quite apart from its role in providing a basis for input from scholars and peers, one can see this task as a useful contributor to the student's learning by requiring the student to organize and synthesize important aspects of the research plan, the method, and emerging findings.

Appendix H: A Sample CFN: PACIS 2016 Doctoral Consortium



PACIS2016 Doctoral Consortium: Call for Nominations

Important dates	
Nomination deadline	March 4, 2016
Notification of acceptance	April 22, 2016

We invite nominations for the 19th Pacific Asia Conference on Information Systems (PACIS) 2016 Doctoral Consortium to be held on June 27-28, immediately prior to the PACIS 2016 Conference, Chiayi, Taiwan.

Universities are invited to nominate candidates for the consortium. Eligible candidates are Ph.D. students in Information Systems (IS) who have developed a plan for pursuing their dissertation and would benefit from constructive feedback from senior scholars in the field. The consortium aims to provide doctoral students with an opportunity to share their research ideas and network with peers and experienced faculty serving as stream-scholars. Participating students will receive quality feedback from the scholars who are eminent researchers in the field, associated with leading institutions around the globe, many serving in senior editorial positions in the field's top journals. This consortium will be a significant event for emerging IS researchers in the Asia Pacific region.

Nomination eligibility: PhD students who are currently working on a doctoral dissertation in Information Systems, and whose research has progressed to the point where a clear plan of investigation has been laid out, but there is sufficient scope for changes to this plan based on feedback from the consortium.

The ideal consortium candidate should have chosen a theoretical approach and initiated planning or implementation of empirical work, but should have at least six months of work remaining at the time of the consortium.

The nominated candidates must be sufficiently proficient in English to participate in the consortium, since the language of the consortium will be English.

While some priority will be given to students from institutions in the Asia-Pacific region (AIS Region 3), strong nominations from other AIS regions will be seriously considered.

Nomination Process: in the interests of diversity and equity, though more than one nomination is allowed from a single institution, we require that multiple nominees be ranked by the nominating institution in advance of nomination. Note that the first-ranked nominees will have equal chance against other first-ranked or sole nominees. The 2nd ranked nominees would only be considered after all 1st ranked/sole nominees.

Students must be nominated by an IS faculty member. The nomination should follow the guidelines below: A submitted proposal should outline the research topic, research question(s), theoretical foundations, proposed methodology, current stage of the research, and plans for completion.

A nomination letter from either the director of the IS doctoral program, the IS department's chairperson, or the candidate's thesis/dissertation advisor/supervisor should certify that that the candidate is the nominee from the university/institution, and that the candidate meets the eligibility criteria mentioned above.

Nomination submission requirements: the proposal should be sole-authored by the candidate and meet the requirements of research-in-progress (RIP) submissions for PACIS, since accepted proposals

will have the option of being published in the conference proceedings as RIP papers (and possibly presented as posters).

Submit your proposal to the PACIS 2016 official website at www.pacis2016.org before the deadline. It must not exceed seven (7) single-spaced pages and must confirm to the PACIS 2016 word template (a link to which is in the paper submission web pages). The 7 pages must include all text, figures, tables, and appendices. In other words, the cover page, abstract, keywords, and references are excluded from this page count. Please note that the length restriction is strict; proposals that do not follow the requirements will not be considered. A cover page should show the candidate's full name, affiliation (university and school/department), and all contact details including name, mailing and e-mail addresses, and telephone and fax numbers. The candidate should also indicate the name(s) of his or her principal faculty supervisors.

Confidentiality: the publication of student reports in the conference proceedings as research-in-progress papers (and any related poster session) is optional. It is recognised that in exceptional cases, exposure of early research work may be a concern. Note that student reports received by the co-Chairs are circulated only to the stream scholars and student peers within a stream, all of whom are counselled to keep the reports and related discussions confidential to the stream.

Consortium schedule: consortium activities will commence with Registration and a Panel in the afternoon on Monday, 27 June, followed by a welcome dinner. A full day event is scheduled 28 June, which will focus on providing constructive feedback to students on their research.

The Consortium will include a balanced mix of students representing diverse research topics, methods, schools and cultures. Each student will present his or her research in a designated stream led by 2-3 stream scholars, who will have carefully reviewed the student submissions. Participants are required to have carefully reviewed all proposals in their stream prior to the Consortium so that they are prepared to contribute to the discussion on each student's research.

Registration and cost: accepted consortium students are required to register for the main conference by the early-bird date (student rate), and will receive further feedback on their research at a poster session (if included in proceedings).

There is no charge for the consortium, but home institutions are encouraged to provide financial assistance to successful nominees in the form of conference registration, travel and accommodation aid. More detailed information about the consortium will be provided on acceptance.

Submission contact information: please contact Guy Gable (g.gable@qut.edu.au) with questions. Please copy your proposal and nomination details by email to the Consortium Co-Chairs (ewang@mgt.ncu.edu.tw and g.gable@qut.edu.au).

Stream scholars:
• Wai Fong Boh, Nanyang Technological University, Singapore • Patrick Chau, The University of Hong Kong, HK • Ming-Hui Huang, National Taiwan University, Taiwan • Wayne Huang, Xi'an Jiaotong University, China • James Jiang, National Taiwan University, Taiwan • Elena Karahanna, University of Georgia, USA • Ji-Ye Mao, Renmin University of China, China • Arun Rai, Georgia State University, USA • James Thong, Hong Kong University of Science and Technology, HK • Youngjin Yoo, Temple University, USA
Doctoral consortium co-chairs:
• Eric Wang, National Central University, Taiwan • Guy Gable, Queensland University of Technology, Australia

Appendix I: Student Presentation and Feedback Sessions

In this appendix, we offer suggestions about running the student presentation and feedback sessions. Typically, the scholars in each stream administer this process in their stream.

Attendance

For effectiveness and confidentiality reasons, attendance at each of these parallel streams is typically restricted to those students presenting in the stream, the stream's scholars, and the co-chairs. The students' supervisors are certainly barred as generally is anyone other than those listed (policy here is likely to differ for local consortia as described earlier).

Student Presentations

Presentations should be practiced in advance and kept to a maximum of approximately half the time available (thus, a maximum of 20 minutes of a 40-minute session or 30 minutes of a 60-minute session). A timekeeper (a scholar or appointed student) should signal the student when five minutes remain and the student should be required to finish on time.

Feedback

Peer students in attendance may be intimidated by the scholars; thus, it is good practice following the presentation for the scholars to invite questions from the room prior to posing their own questions and offering feedback.

Capturing Feedback

There are various means of capturing feedback that allow the student presenter to focus on the questions, comments, and their responses. Regardless, there is much merit in the student carefully and in as much detail as possible documenting their recollections as soon as possible after the session (possibly rough notes during the break and typed thoughts later in that evening). Consortia should explore unanimous support for any recording devices in advance and inform students in advance whether recording devices are encouraged disallowed. Reasons for allowing or disallowing recordings are several and the wishes of the scholars should be respected. A buddy system whereby each student is partnered with a buddy whose role is to document as much feedback as possible during the session can work well because it frees the presenter to focus on the discussion. Buddies may be formally assigned in advance or proactively organized by individual students.

Tone of Feedback

All students' experience of the Consortium should be positive regardless of the extent of criticism and scrutiny their work attracts. Scholars and student stream peers should be counselled strongly to ensure they constructively present any advance feedback and feedback on the day and, as far as possible, acknowledge efforts to date. It's always good to commence feedback following the presentation with several positive observations.

About the Authors

Guy Gable (PhD Bradford, MBA Ivey) is Professor and Academic Director Research, Information Systems School, Queensland University of Technology, Brisbane Australia, where he heads their "Research Systems" Research Program. He is Senior Editor for *JSIS* (since 2003), and has served on the editorial boards of *MISQ*, *JAIS*, *EJIS*, and others. A Charter Member, he's held a range of AIS roles. Main research interests include Research Systems, IT Evaluation, and Design Science. He has over 100 refereed publications (e.g., *MS, JAIS, JSIS, I&M, EJIS*). He's been highly active in Asia and is currently Adjunct Professor Renmin University of China and Senior Visiting Professor of Xi'an Jiaotong University. He was Visiting Professor University of Hong Kong 2002-2007 (one month a year) and Senior Fellow National University of Singapore (1986-1994). As First Chief Investigator, he's led a series of successful ARC grants totaling several million AUD$; most recently (2014) an ARC Discovery titled "Towards Engineering Behavioral Research Design Systems".

Robert Smyth (PhD QUT) is currently a Visiting Fellow in the Information Systems School in the Science and Engineering Faculty at Queensland University of Technology (QUT). His association with Information Systems at QUT has been a long one. In January 1969 he joined IBM in its Brisbane Service Bureau, where he worked as a systems analyst. In August 1972 he commenced as a Lecturer in Data Processing in the Department of Management at QUT's predecessor, Queensland Institute of Technology (QIT). In 1989, he was awarded QUT's inaugural Award for Distinguished Academic Service "for outstanding teaching and his contribution to major curriculum development in information systems". In 2002, he retired from his then position of Assistant Dean (Postgraduate) in the Faculty of Information Technology at Queensland University of Technology, returning to QUT later to work part-time in research in the School of Information Systems. His main research interests include IT Professional Services, Computer Aided Software Engineering, Knowledge Management, and Enterprise Systems.

Alison Gable (PhD UQ, MEd QUT) is an early career researcher located in the School of Social Science at the University of Queensland, Brisbane Australia. She received her PhD in Inclusive Education in 2012 and taught in the pre-service teacher education program in the School of Education. She is a post-doctoral research fellow on an Australian Research Council funded project examining the use of performance measurement in Australian education and health policy domains. Her doctoral and post-doctoral research has focused on the sociology of professionalism in schooling, higher education and general practice. She is a visiting fellow at the Information Systems School at Queensland University of Technology where she has been involved in the delivery of research training in modules on the philosophy of science and in applied critical realist research.